

# CONVENTIONAL ELECTRICAL MODULES

---



CHAPTER



2

## CONTENTS OF THIS CHAPTER



<i>Conventional Electrical Modules</i> . . . . .	2-2
<i>Cables</i> . . . . .	2-2
<i>Specifications</i> . . . . .	2-3

### CONVENTIONAL ELECTRICAL MODULES

For pneumatic only systems, with no I/O, a conventional electrical module may be used. PAL-E25 supports up to 21 solenoids and PAL-E44 supports up to 38 solenoids. The cables listed below were designed to fit the electrical connection modules and maintain IP65 protection.

PAL System - Conventional Electrical Modules			
Item	Part No.	Description	Electrical Cables
	<b>PAL-E25</b>	NITRA electrical connection module, 12-24 VDC, (21) solenoid(s), IP65. For use with PAL series. Requires PAL series 25-pin male D-sub control cable.	Listed below
	<b>PAL-E44</b>	NITRA electrical connection module, 12-24 VDC, (38) solenoid(s), IP65. For use with PAL series. Requires PAL series 44-pin male D-sub control cable.	

### CABLES

Electrical Module Power Cables			
Item	Part No.	Description	Length
	<b>PAL-ACC04</b>	NITRA control cable, 25-pin D-sub right-angle female to pigtail, IP65, 3.2ft/1m cable length. For use with PAL-E25 electrical connection module.	3.2 ft (1m)
	<b>PAL-ACC05</b>	NITRA control cable, 25-pin D-sub right-angle female to pigtail, IP65, 8.2ft/2.5m cable length. For use with PAL-E25 electrical connection module.	8.2 ft (2.5 m)
	<b>PAL-ACC06</b>	NITRA control cable, 25-pin D-sub right-angle female to pigtail, IP65, 16.4ft/5m cable length. For use with PAL-E25 electrical connection module.	16.4 ft (5m)
	<b>PAL-ACC07</b>	NITRA control cable, 44-pin D-sub right-angle female to pigtail, IP65, 3.2ft/1m cable length. For use with PAL-E44 electrical connection module.	3.2 ft (1m)
	<b>PAL-ACC08</b>	NITRA control cable, 44-pin D-sub right-angle female to pigtail, IP65, 8.2ft/2.5m cable length. For use with PAL-E44 electrical connection module.	8.2 ft (2.5 m)
	<b>PAL-ACC09</b>	NITRA control cable, 44-pin D-sub right-angle female to pigtail, IP65, 16.4ft/5m cable length. For use with PAL-E44 electrical connection module.	16.4 ft (5m)

**SPECIFICATIONS**

Conventional Electrical Module Specifications	
<b>Maximum Admissible Current (PAL-E25, PAL-E44)</b>	With multi-pole connection 6A continuous, 9A instantaneous With fieldbus connection 4A continuous, 6A instantaneous for valve supply; 4A continuous, 6A instantaneous for bus and signal supply
<b>Protection</b>	Overload and short-circuit protected solenoid pilot Output
<b>Diagnostics</b>	LED signal on valve, LED on electrical connection and software message regarding: short-circuited solenoid pilot; solenoid pilot with coil failure; voltage out of range (undervoltage and overvoltage); module communication control; on switching, configuration other than that stored
<b>Maximum Number of Solenoid Pilots</b>	128
<b>Maximum number of simultaneously controllable solenoid pilots to actuate a greater number of solenoid pilots at the same time, add "Intermediate module PAL-M12P" with electrical connection</b>	38
<b>Maximum Number of I/O</b>	128 digital inputs, 128 digital outputs, 16 analog inputs, 16 analog outputs
<b>Maximum Number of Modules</b>	40 Bases for valves + 16 digital inputs + 16 digital outputs + 4 analog inputs + 4 analog outputs

**BLANK  
PAGE**